



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/120,973

07/22/1998

NEHEMIA AMIR

05026.0024

2803

27130

7590

07/12/2004

EITAN, PEARL, LATZER & COHEN ZEDEK LLP  
10 ROCKEFELLER PLAZA, SUITE 1001  
NEW YORK, NY 10020

EXAMINER

GRIER, LAURA A

ART UNIT

PAPER NUMBER

2644

DATE MAILED: 07/12/2004

17

Please find below and/or attached an Office communication concerning this application or proceeding.

9

*Supplemental*  
**Office Action Summary**

Application No.

09/120,973

Applicant(s)

AMIR, NEHEMIA

Examiner

Laura A Grier

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5-8, 10-21, 55 and 56 is/are pending in the application.
- 4a) Of the above claim(s) 28-54 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7, 10-13 and 17-21 is/are allowed.
- 6) ☒ Claim(s) 5-6, 8, 14-16, 55-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION**

1. In response to applicant's telephone inquiry regarding the last Office action, the following corrective action is taken.
2. The period for reply of 3 MONTHS set in said Office Action is restarted to begin with the mailing date of this letter.
3. A corrected copy of the last Office Action is enclosed.
4. The indicated allowability of claims 5, 6, 8, 14-15 and 16 is withdrawn in view of the Office Action cited below.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 5-6 and 55-56** are rejected under 35 U.S.C. 102(e) as being anticipated by Tamamura.

Regarding **claims 5 and 55-56**, Tamamura et al. (herein, Tamamura) discloses a vehicle internal noise reduction system and the method thereof. Tamamura's disclosure comprises a

Art Unit: 2644

microphone (15) – (claim 55), which reads an input transducer means; a speaker (14) – (claim 56), which reads on an output actuator means; an adaptive filter (7), which reads on an echo cancellation means, and the speaker itself represents the antinoise means; and the microphone and the speaker are in close proximity of each other (figure 1, col. 2, lines 28-50); and the transmission characteristic compensation section (8) coupled therein with tap value updating section (9), convolution section (2) and a filter coefficient recording section (1), (col. 2, lines 60 – col. 3, lines 55) reads on the correction means.

Regarding **claim 6**, Tamamura et al. (herein, Tamamura) discloses a vehicle internal noise reduction system and the method thereof. Tamamura's disclosure comprises a microphone (15), which reads an input transducer means; a speaker (14), which reads on an output actuator means; an adaptive filter (7), which reads on an echo cancellation means, and the speaker itself represents the antinoise means; and the microphone and the speaker are in close proximity of each other (figure 1, col. 2, lines 28-50); and the transmission characteristic compensation section (8) coupled therein with tap value updating section (9), convolution section (2) and a filter coefficient recording section (1), (col. 2, lines 60 – col. 3, lines 55) reads on the correction means, and wherein the filter coefficient recording section supports the storage means as well (col. 4, lines 42-60 and col. 5, lines 19-24).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2644

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 8, and 14-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamamura.

Regarding **claim 8**, Tamamura discloses a vehicle internal noise reduction system and the method thereof. Tamamura's disclosure comprises a microphone (15), which reads an input transducer means; a speaker (14), which reads on an output actuator means; an adaptive filter (7), which reads on an echo cancellation means, and the speaker itself represents the antinoise means; and the microphone and the speaker are in close proximity of each other (figure 1, col. 2, lines 28-50); and the transmission characteristic compensation section (8) coupled therein with tap value updating section (9), convolution section (2) and a filter coefficient recording section (1), (col. 2, lines 60 – col. 3, lines 55) reads on the correction means. However, Tamamura fails to specifically disclose an equalizer. The use of an equalizer was well known in the art for the compensation of gain and delay distortion among a frequency range. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Tamamura by implementing an equalizer for the purpose of reducing frequency distortion.

Regarding **claims 14-15**, Tamamura et al. (herein, Tamamura) discloses a vehicle internal noise reduction system and the method thereof. Tamamura's disclosure comprises a microphone (15), which reads an input transducer means; a speaker (14), which reads on an output actuator means; an adaptive filter (7), which reads on an echo cancellation means, and the speaker itself represents the antinoise means; and the microphone and the speaker are in close proximity of each other (figure 1, col. 2, lines 28-50); and the transmission characteristic compensation

section (8) coupled therein with tap value updating section (9), convolution section (2) and a filter coefficient recording section (1), (col. 2, lines 60 – col. 3, lines 55) reads on the correction means. However, Tamamura fails to specifically disclose anti-alias filter.

Regarding the anti-alias filter, the use of such a filter, such as a low pass filter was well known in the art. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Tamamura by implementing an anti-alias filter, like a LPF for the purpose of filtering any information or frequency higher than the original frequency signal of being used by the system.

Regarding **claim 16**, Tamamura discloses a vehicle internal noise reduction system and the method thereof. Tamamura's disclosure comprises a microphone (15), which reads an input transducer means; a speaker (14), which reads on an output actuator means; an adaptive filter (7), which reads on an echo cancellation means, and the speaker itself represents the antinoise means; and the microphone and the speaker are in close proximity of each other (figure 1, col. 2, lines 28-50); and the transmission characteristic compensation section (8) coupled therein with tap value updating section (9), convolution section (2) and a filter coefficient recording section (1), (col. 2, lines 60 – col. 3, lines 55) reads on the correction means. However, Tamamura fails to specifically disclose low pass filter.

Regarding the low pass filter, the use of such a filter was well known in the art. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Tamamura by implementing a low pass filter for the purpose of

Art Unit: 2644

limiting the frequency band the of signal containing oscillations and stabilizing the feedback signal.

9. Claims 7, 10-13, 17-21 and 23 are allowed.

***Response to Arguments***

10. The applicant did not provided in arguments. Remarks were made regarding the amending the claims previously indicated as allowable subject, and new claims were added.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

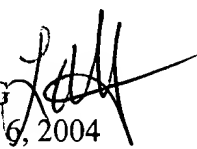
**Or faxed to:**

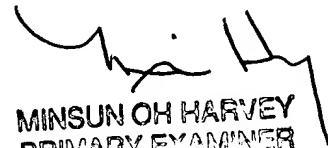
**(703) 872-9314 (for Technology Center 2600 only)**

Art Unit: 2644

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding  
should be directed to the receptionist whose telephone number is (703) 305-4700.

LAG   
July 6, 2004

  
MINSUN OH HARVEY  
PRIMARY EXAMINER